



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

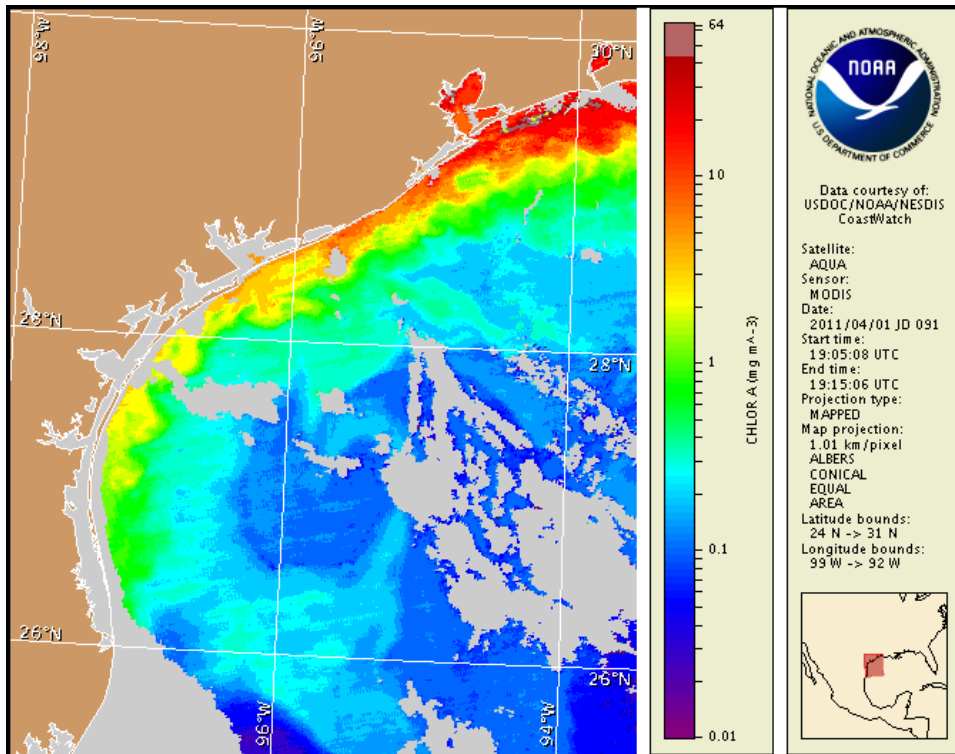
Monday, 04 April 2011

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, March 28, 2011



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from March 25 to April 1 shown as red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Conditions Report

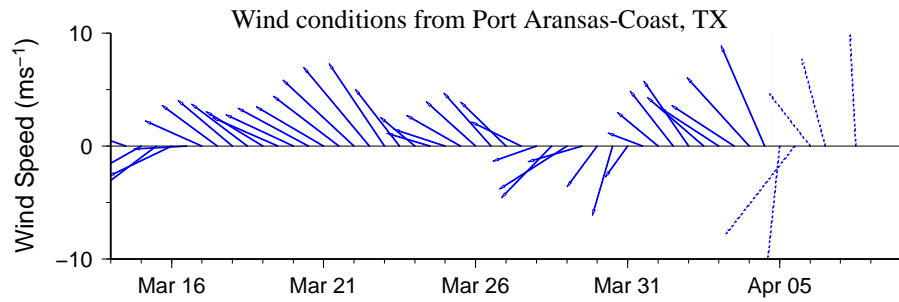
There is currently a bloom of the harmful algae, *Dinophysis*, around St. Charles, Corpus Christi and Aransas bays. This algal bloom does not produce respiratory irritation impacts associated with the Texas red tide caused by *Karenia brevis*. No respiratory irritation impacts are expected alongshore Texas today through Sunday, April 10.

Analysis

A bloom of *Dinophysis ovum* continues to be reported in St. Charles, Corpus Christi, and Aransas bays. Blooms of *Dinophysis* are rare in the US and we do not have a standard for monitoring with remote sensing. Imagery does not provide a useful reference for the blooms, but may help visualize circulation patterns. *Dinophysis* does not produce respiratory impacts associated with the Texas red tide caused by *Karenia brevis*; however, the bloom has resulted in shellfishing restrictions in the following areas and bays: Corpus Christi, Aransas, and St. Charles (TPWD; 3/24). Updates on this bloom will continue to be provided as information becomes available. Recent imagery is partially obscured by patches of clouds along the coast. High to significant levels of chlorophyll (10 to >20 $\mu\text{g/L}$) are visible along- and offshore stretching from Sabine Pass to the Galveston Bay area. Elevated chlorophyll (2-7 $\mu\text{g/L}$) is visible along- and offshore stretching from the Galveston Bay area to an area south of Baffin Bay. Elevated chlorophyll seems to be due to the resuspension of benthic chlorophyll and sediments and is most likely not related to a harmful algal bloom.

Transport models are based on movement in the Gulf of Mexico, thus we cannot forecast the transport of the *Dinophysis* bloom in the bays at this time. Forecast models indicate a potential maximum transport of 50 km south along the coast from Port Aransas from April 3 to 7.

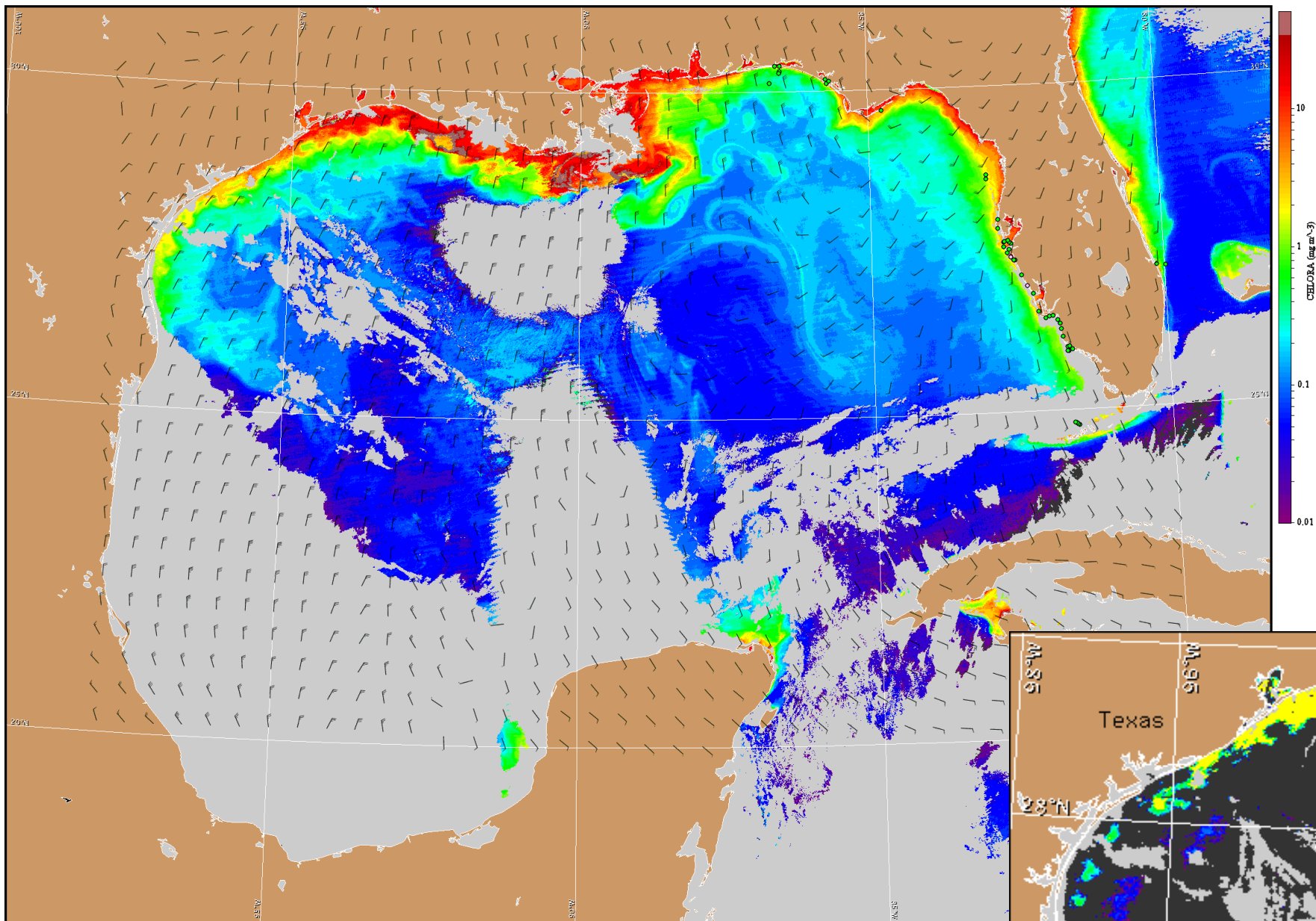
Kavanaugh, Derner



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

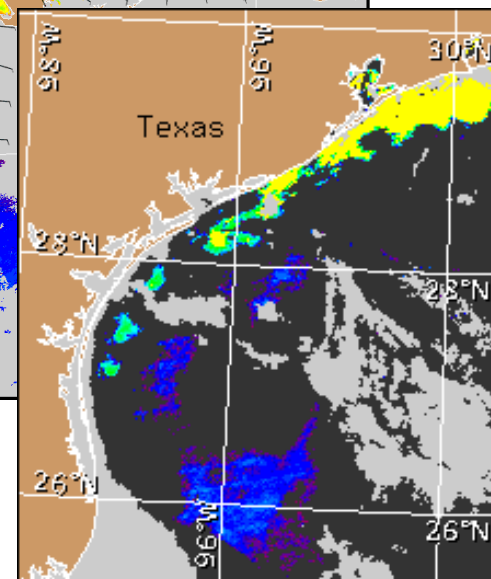
Wind Analysis

Southwest winds (10-15 kn, 5-8 m/s) becoming north winds (20-30 kn, 10-15 m/s) this evening. Northeast to east winds (10-25 kn, 5-13 m/s) Tuesday. South to southeast winds (10-20 kn, 5-10 m/s) Tuesday evening through Friday.



Satellite chlorophyll image and forecast winds for April 5, 2011 12Z with cell concentration sampling data from March 25 to April 1 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).